

What is claimed is:

1. A printed substrate for mounting a filter, characterized by comprising:
an input side terminal electrode and an output side terminal electrode in a fitting
region for said filter, and

5 a slit pierced through said printed substrate in said fitting region for intersecting
the straight line which joins said input side terminal electrode and said output side
terminal electrode.

10 2. A printed substrate as described in Claim 1, characterized in that said slit
extends in a direction which is orthogonal to the transmission direction of an input signal
within said filter.

15 3. A printed substrate as described in Claim 1, characterized by further comprising
a wiring for said input side terminal electrode and a wiring for said output side terminal
electrode, wherein the direction in which said slit extends intersects the direction in
which each of said wirings extends.

20 4. A printed substrate as described in any one of Claims 1 through 3, characterized
in that a through hole is provided which electrically connects together the surface of said
printed substrate and the rear surface of said printed substrate which has been grounded.

25 5. A printed substrate as described in any one of Claims 1 through 4, characterized
in that said filter utilizes langasite as its piezoelectric element, and allows signals of a
predetermined frequency band to pass by taking advantage of surface elastic waves
which are transmitted along the surface of said piezoelectric element.

6. A printed substrate for mounting a filter, characterized by comprising:
an input side terminal electrode and an output side terminal electrode in a fitting
region for said filter; and
a wiring for said input side terminal electrode and a wiring for said output side
5 terminal electrode, wherein each of said wirings extend in a direction which is parallel to
the transmission direction of an input signal within said filter.

7. A printed substrate as described in Claim 6, characterized in that each of said
wirings extend in a direction which is orthogonal to the transmission direction of an input
10 signal within said filter up to an elbow position at a predetermined distance from said
fitting region, and extend in a direction parallel to the transmission direction of the input
signal within said filter at said elbow position.

8. A printed substrate as described in Claim 7, characterized in that said
15 predetermined distance is less than or equal to 10 mm.

9. A printed substrate as described in any one of Claims 6 through 8, characterized
in that said filter utilizes langasite as its piezoelectric element, and allows signals of a
predetermined frequency band to pass by taking advantage of surface elastic waves
20 which are transmitted along the surface of said piezoelectric element.

10. A printed substrate for mounting a filter, characterized by comprising:
an input side terminal electrode and an output side terminal electrode in a fitting
region for said filter;
25 a wiring for said input side terminal electrode and a wiring for said output side

terminal electrode, each of said wirings extending in a direction which is orthogonal to the transmission direction of an input signal within said filter up to an elbow position at a predetermined distance from said fitting region, and extending in a direction parallel to the transmission direction of the input signal within said filter at said elbow position; and

5 a through hole which electrically connects together the surface of said printed substrate and the rear surface of said printed substrate which has been grounded.

11. A printed substrate as described in Claim 10, characterized in that said through hole is provided in the vicinity of said input side terminal electrode and said output side

10 terminal electrode.

12. A printed substrate as described in Claim 10 or Claim 11, characterized in that the diameter of said through hole is 0.3 to 0.5 mm.

15 13. A printed substrate as described in any one of Claims 10 through 12,

characterized in that said through hole outside of said fitting region is provided in a region within a predetermined distance from said fitting region.

14. A printed substrate as described in any one of Claims 10 through 13,

20 characterized in that said filter utilizes langasite as its piezoelectric element, and allows signals of a predetermined frequency band to pass by taking advantage of surface elastic waves which are transmitted along the surface of said piezoelectric element.

15. An amplification device in a communication system, characterized by

25 comprising a printed substrate as described in any one of Claim 1 through Claim 14.

16. A distribution device in a communication system, characterized by comprising any one of a printed substrate as described in any one of Claim 1 through Claim 14, and an amplification device as described in Claim 15.

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17. A composition device in a communication system, characterized by comprising any one of a printed substrate as described in any one of Claim 1 through Claim 14, and an amplification device as described in Claim 15.

10 18. A switchover device in a communication system, characterized by comprising any one of a printed substrate as described in any one of Claim 1 through Claim 14, and an amplification device as described in Claim 15.

15 19. A signal reception device in a communication system, characterized by comprising any one of a printed substrate as described in any one of Claim 1 through Claim 14, an amplification device as described in Claim 15, a distribution device as described in Claim 16, a composition device as described in Claim 17, and a switchover device as described in Claim 18.

20 20. A signal transmission device in a communication system, characterized by comprising any one of a printed substrate as described in any one of Claim 1 through Claim 14, an amplification device as described in Claim 15, a distribution device as described in Claim 16, a composition device as described in Claim 17, and a switchover device as described in Claim 18.

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21. A mobile station device in a mobile communication system, characterized by comprising a signal reception device as described in Claim 19 and a signal transmission device as described in Claim 20.

5 22. A base station device in a mobile communication system, characterized by comprising a signal reception device as described in Claim 19 and a signal transmission device as described in Claim 20.

23. A wireless communication device which performs wireless communication, 10 characterized by comprising any one of a printed substrate as described in any one of Claim 1 through Claim 14, an amplification device as described in Claim 15, a distribution device as described in Claim 16, a composition device as described in Claim 17, a switchover device as described in Claim 18, a signal reception device as described in Claim 19, a signal transmission device as described in Claim 20, a mobile station 15 device as described in Claim 21, and a base station device as described in Claim 22.

24. An electronic component comprising a shield structure, characterized by comprising:

20 a printed substrate comprising a fitting region for mounting a filter; a filter which is mounted in said fitting region of said printed substrate; and a protective member which comprises a conductive surface, and which is in contact with a surface of said filter, wherein said conductive surface of said protective member which is in contact with the surface of said filter is set so as to be of the same size as said surface of said filter, or so as to be smaller than the surface of said filter.

25. An electronic component comprising a shield structure as described in Claim 24, characterized by further comprising a shield box which covers said filter and said protective member, and wherein said conductive surface of said protective member is in contact with the inner surface of said shield box.

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26. An electronic component comprising a shield structure as described in Claim 25, characterized in that said protective member is capable of elastic deformation, and the thickness of said protective member when it has been elastically deformed in the state in which the conductive surface of said protective member is in contact with the surface of 10 said filter and the inner surface of said shield box is set so as to be 50% to 80% of its thickness in the natural state.

27. An electronic component comprising a shield structure as described in any one of Claim 24 through Claim 26, characterized in that said protective member is formed in 15 a roughly circular pillar shape, and the axial line direction of said protective member is arranged so as to be parallel to the transmission direction of the input signal in said filter.

28. An electronic component comprising a shield structure as described in any one of Claim 1 through Claim 3, characterized in that said protective member is formed in a 20 roughly circular pillar shape, and the axial line direction of said protective member is arranged so as to intersect with the transmission direction of the input signal in said filter.

29. An electronic component comprising a shield structure as described in any one of Claim 24 through Claim 28, characterized in that said filter utilizes langasite as its 25 piezoelectric element, and allows signals of a predetermined frequency band to pass by

taking advantage of surface elastic waves which are transmitted along the surface of said piezoelectric element.

30. An amplification device in a communication system characterized by
5 comprising an electronic component as described in any one of Claim 24 through Claim
29.

31. A distribution device in a communication system characterized by comprising
any one of an electronic component as described in any one of Claim 24 through Claim
10 29, and an amplification device as described in Claim 30.

32. A composition device in a communication system characterized by comprising
any one of an electronic component as described in any one of Claim 24 through Claim
29, and an amplification device as described in Claim 30.

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33. A switchover device in a communication system characterized by comprising
any one of an electronic component as described in any one of Claim 24 through Claim
29, and an amplification device as described in Claim 30.

20 34. A signal reception device in a communication system characterized by
comprising any one of an electronic component as described in any one of Claim 24
through Claim 29, an amplification device as described in Claim 30, a distribution device
as described in Claim 31, a composition device as described in Claim 32, and a
switchover device as described in Claim 33.

35. A signal transmission device in a communication system characterized by comprising any one of an electronic component as described in any one of Claim 24 through Claim 29, an amplification device as described in Claim 30, a distribution device as described in Claim 31, a composition device as described in Claim 32, and a 5 switchover device as described in Claim 33.

36. A mobile station device in a mobile communication system, characterized by comprising a signal reception device as described in Claim 34 and a signal transmission device as described in Claim 35.

10 37. A base station device in a mobile communication system, characterized by comprising a signal reception device as described in Claim 34 and a signal transmission device as described in Claim 35.

15 38. A wireless communication device which performs wireless communication, characterized by comprising any one of an electronic component as described in any one of Claim 24 through Claim 29, an amplification device as described in Claim 30, a distribution device as described in Claim 31, a composition device as described in Claim 32, a switchover device as described in Claim 33, a signal reception device as described 20 in Claim 34, a signal transmission device as described in Claim 35, a mobile station device as described in Claim 36, and a base station device as described in Claim 37.